

DOCKET NO: 286235US2PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
KOUTAROU SUGISAWA, ET AL. : EXAMINER: UNASSIGNED
SERIAL NO: 10/568,508 :
FILED: FEBRUARY 16, 2006 : GROUP ART UNIT: UNASSIGNED
FOR: COMMUNICATION APPARATUS :

PETITION TO MAKE SPECIAL UNDER 37 CFR §1.102 AND MPEP §708.02(VIII)

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant hereby requests granting of a petition to make special in conjunction with the above-identified application and in view of the remarks set forth below:

REMARKS

Applicant hereby submits this petition to make special and notes that this petition is accompanied by the appropriate fee set forth in 37 C.F.R. §1.17(h) as required by MPEP §708.02 (VIII)(A).

It is noted that the invention set forth in Claims 4-18 of the application is believed to be directed to a single invention as required under the guidelines set forth in MPEP §708.02 VIII(B). In addition, Applicant agrees to make a telephone election without traverse should it be determined that these claims are directed to more than a single invention under applicable U.S. patent practice and procedure as also noted in MPEP §708.02 (VIII)(B).

In addition, a pre-examination search was made by the Japanese Patent Office with respect to the parent Japanese PCT application (PCT/JP05/10338). MPEP §708.02 (VIII)(C) indicates that a search made by a foreign patent office satisfies the requirement as to a pre-examination search and that a listing of the field of search set forth therein satisfies the requirement for a listing of the field of search. A copy of the search report was filed as part of an Information Disclosure Statement (IDS) on May 16, 2006 and a second copy is included herewith which indicates that the minimum documentation searched was “Int. Cl⁷ H04BI/707” and that the additional documentation searched was “Jitsuyo Shinan Koho 1922-1996, Jitsuyo Shinan Toroku Koho 1996-2005, Kokai Jitsuyo Shinan Koho 1971-2005, and Toroku Jitsuyo Shinan Koho 1994-2005.”

In accordance with MPEP §708.02 (VIII) (D), Applicant is also submitting one copy of the references cited in the search report that are discussed below in addition to the previous submittal of these references in the above-noted IDS. In further accordance with MPEP §708.02 (VIII)(E), applicant also includes below a detailed discussion of these references, which discussion points out how the claimed subject matter is patentable over these references with the particularity required by 37 CFR §1.111(b) and (c).

DISCUSSION

Set forth below is a comparison of references cited in the search report. Applicant's comments are provided as to basic reference teachings and the reasons why it is believed that these references do not teach, anticipate, or render obvious the claimed invention whether considered alone or together in any proper combination.

JP 2001-16139 and GB2352944, the equivalent reference in English, teach a modulation apparatus carrying out spread modulation by using spreading codes selected so that two consecutive pairs of inphase (I) and quadrature (Q) data correspond to two points

located on the same point or are symmetrical with respect to the zero point in the phase domain.

However, neither JP 2001-16139 nor GB 2352944 teach controlling the assignment of channelization codes such that based on a size of a factor that is multiplied to the data channel and the control channel, a first channelization code is assigned to a data channel of which the factor is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Further, JP 2001-16139 and equivalent GB 2352944 do not teach or suggest controlling assignment of channelization codes such that out of data channels multiplexed by the IQ multiplexing, a first channelization code is assigned to a data channel of which data amount is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

JP 2004-80734 and EP 1389844, the equivalent reference in English, teach an apparatus which checks sequences of Walsh codes respectively input to multiple channels, and according to the sequence of the Walsh codes, selects a set of the repeated complex functions output from a Walsh rotator

However, neither JP 2004-80734 nor equivalent EP 1389844 teach or suggest controlling assignment of channelization codes such that based on a size of a factor that is multiplied to the data channel and the control channel, a first channelization code is assigned to a data channel of which the factor is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Further, JP 2004-80734 and equivalent EP 1389844 do not teach or suggest controlling assignment of channelization codes such that out of data channels multiplexed by the IQ multiplexing, a first channelization code is assigned to a data channel of which data amount is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

JP 2002-33716 and US Published Application No. 2002/0021744, the equivalent reference in English, teach CDMA terminal apparatus, in which a 0th orthogonal code (Cch, 256, 0) for the spreading factor of 256 is assigned to a control channel (DPCCH), a 1st orthogonal code (Cch, 4, 1) for the spreading factor of 4 is assigned to a first data channel (DPDCH₁) and a second data channel (DPDCH₂), and a 0th orthogonal code (Cch, 4, 0) for the spreading factor of 4 is assigned to a third data channel (DPDCH₃) to perform multiplication and the multiple code multiplex.

However, JP 2002-33716 and equivalent US 2002/0021744 do not teach or suggest controlling assignment of channelization codes such that based on a size of a factor that is multiplied to the data channel and the control channel; a first channelization code is assigned to a data channel of which the factor is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Further, JP 2002-33716 and equivalent US 2002/0021744 do not teach or suggest controlling assignment of channelization codes such that out of data channels multiplexed by the IQ multiplexing, a first channelization code is assigned to a data channel of which data amount is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

“3GPP TR25.896 V6.0.0” teaches a structure of a processing unit for carrying out IQ multiplexing of a communication apparatus which can transmit E-DCH (Enhanced Dedicated Channel) (see Fig. 8.4.9, for example).

However, 3GPP TR 25.896 V6.00 does not disclose controlling assignment of channelization codes such that based on a size of a factor that is multiplied to the data channel and the control channel, a first channelization code is assigned to a data channel of which the factor is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Further, 3GPP TR 25.896 V6.0.0 does not teach or suggest controlling assignment of channelization codes such that out of data channels multiplexed by the IQ multiplexing, a first channelization code is assigned to a data channel of which data amount is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

The partial English translation of the relevant portion of Fujiwara, A. et al., “Modified HPSK Modulation Scheme for Wideband CDMA Systems,” teaches change of phase of signal constellation on HPSK modulation.

However, this reference does not teach or suggest controlling assignment of channelization codes such that based on a size of a factor that is multiplied to the data channel and the control channel, a first channelization code is assigned to a data channel of which the factor is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Further, this reference does not teach or suggest controlling assignment of channelization codes such that out of data channels multiplexed by the IQ multiplexing, a

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first channelization code is assigned to a data channel of which data amount is large, and a second channelization code being different from the first channelization code is assigned to a data channel to which no channelization code has been assigned.

Turning to the present invention, it is noted that a preliminary amendment has been filed that cancels Claims 1-3 and presents new Claims 17 and 18 that correspond to Claims 4 and 12 in method form. The present invention is, thus, now directed to subject matter that was not found to be present in any of the references cited by the International Searching Authority in terms of the above noted particulars appearing in each of the independent claims (and thus incorporated into each of the claims dependent thereon).

As an anticipation rejection under 35 U.S.C. §102 requires the citation of a single prior art reference that discloses each and every element arranged together exactly as in the claimed arrangement (*See, for example, In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); *Lindemann Maschinen Fabrik GMBH v. American Hoist & Derrick Co.*, 221 USPQ 481 (Fed. Cir. 1984); and *Ex parte Gould*, 6 USPQ2d 1680 (Bd. Pat. App. & Int. 1987)); and *Ex parte Osmond*, 191 USPQ 334 (Bd. Pat. App. & Int. 1973)), no rejection based upon 35 U.S.C. §102 can be made that relies on any of these references.

Moreover, it is well established that a *prima facie* case of obviousness requires that all claim limitations be considered and demonstrated to be taught or suggested by the prior art, see MPEP §2143.03.

Accordingly, as none of the references cited by the International Searching Authority teach or suggest the claimed subject matter involving the above noted control of the assignment of channelization codes based on either the “size of a factor that is multiplied to the data channel” or “data amount,” Claims 4-18 are submitted to be clearly patentable over these references cited by the International Searching Authority whether these references are considered alone or together in any proper combination.

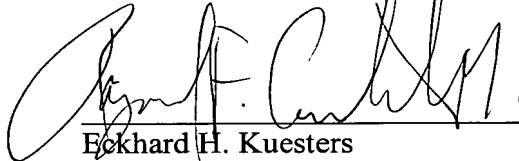
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CONCLUSION

In view of the foregoing, it is believed that this petition to make patent applications special under 37 CFR §1.102 and MPEP §708.02(VIII) should be granted and that an accelerated and favorable Office Action is in order.

Respectfully submitted,

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